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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/687,963

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Nobuyuki Asakura

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08/12/2005

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EXAMINER

MAYO III, WILLIAM H

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.:

10/687,963

Applicant(s)

ASAKURA ET AL.

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12-16 is/are rejected.
- 7) ☒ Claim(s) 8-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The applicant has stated that corrected drawings were included however no drawings were included. In light of the above comment, the drawing objection is repeated below.
2. Figures 11-15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-4, 6-7 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al (Pat Num 6,004,170, herein referred to as Kato). Kato discloses a water cutoff structure (Fig 8) of a covered wire capable of securing a sealing condition and providing reliability in connecting covered wires (Col 2, lines 43-46). With respect to claim 1, Kato discloses a water cutoff structure (Figs 8-9) of covered wire (W1) in which first member (80) and second member (81) having first and second water cutoff portions (86 & 86, respectively) made of resin (Col 2, lines 47-56) respectively are attached on the covered wire (84a) by ultrasonic welding (Col 15, lines 41-49) to thereby provide water cutoff (Col 2, lines 43-46), wherein a first member (80) has first locking portions (87 & 91) and the second member (81) has a second locking portions (87 & 91), wherein the first and second locking portions (87 & 91, respectively) are fitted to each other (Col 14, lines 55-63). With respect to claim 2, Kato discloses that the first locking portion (87 & 91) is formed to be along the first water cutoff portion (86) so as to extend substantially orthogonal to the mating surface of the first member (80). With respect to claim 3, Kato discloses that the first and second locking portions (87 & 91, respectively) are a projected portion and recessed portion respectively, which are fitted to each other (Col 14, lines 56-63). With respect to claim 4, Kato discloses that the opposite sides of the first locking portion (80) is provided with a first positioning projected portion (87) and a first receiving portion (91) respectively and opposite sides of the second locking portion (81) is provided with a second positioning receiving portion (91) fitted to the first positioning projected portion (91) and the second positioning portion (91) fitted to the first positioning receiving portion (91, Cols 14 & 15, lines 55-67

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& 1-8). With respect to claim 6, Kato discloses a water cut off structure (Figs 8-9) comprising a plurality of core lines (84a-e) are covered wires (Col 14, lines 45-49) which comprises a core wire (1) covered by a resin cover (2, as illustrated in Fig 1), wherein the first member (80) and a second member (81) made of resin (Col 2, lines 47-56) respectively are attached on the covered wire (84a) by ultrasonic welding (Col 15, lines 41-49) to thereby provide water cutoff (Col 2, lines 43-46), wherein each of the first and second members (80 & 81) has a laterally width wider than a width when the core lines (84a-b) are laterally arrayed (Fig 9) and molten resin (not shown) is filled among the core lines (84a-e) by applying ultrasonic welding in a state that a pressure is applied from outer sides of the covered wires (84a-e, Col 15, lines 28-47). With respect to claim 7, Kato discloses that the first member (80) includes a recess (82) for receiving a melted substance of the resin cover (3 as illustrated in Fig 1) on a mating surface (86) of the first member (80) to the second member (81) and at least a partition wall (Fig 8) dividing the recess (82) in a longitudinal direction on the covered wire (84a-e) and sandwiching the core lines (84a-e) that are exposed when the resin cover (3 as illustrated in Fig 1) is removed (Col 15, lines 41-47). With respect to claim 12, Kato discloses a water cutoff structure (Figs 8-9) comprising a wire (84a-e), a first member (80) having a first water cutoff portion (86) and a projected portion (87), a second member (81) including a second water cutoff portion (86) and a recessed portion (91), wherein the wire (84a-e) is provided between the first member (80) and the second member (81), wherein the projected portion (87) and the recessed portion (91) are provided outside the region (82) wherein the first member (80) and the second member (81) contact the wire (84a-e),

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and wherein the projected portion (87) is fit to the recessed portion (91, Col 14, lines 55-63). With respect to claim 13, Kato discloses that the first member (80) comprises a recessed portion (91), the second member (81) further comprising a projected portion (87), wherein the projected portion (87) of the second member (81) is fitted to the recessed portion (91) of the first member (80, Cols 14 & 15, lines 55-67 & 1-8). With respect to claim 14, Kato discloses that the projected portion (91) is formed along the first water cutoff portion (86) so as to extend substantially orthogonal to a mating surface (86) of the first member (80). With respect to claim 15, Kato discloses that opposite sides of the projected portion (87) are provided with a first positioning projected portion (87) and a first receiving portion (91) respectively and opposite sides of the recessed portions (91) are provided with a second positioning receiving groove (91) fitted to the first positioning projected portion (87) and the second positioning projected portion (87) fitted to the first positioning receiving portion (91, respectively, Cols 14 & 15, lines 55-67 & 1-8).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 5 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (Pat Num 6,004,170) in view of Ide et al (Pat Num 5,922,993, herein referred to as Ide). Kato discloses a water cutoff structure (Fig 8) of a covered wire capable of securing a sealing condition and providing reliability in connecting covered wires (Col 2, lines 43-46), as disclosed above with respect to claims 1 & 12 above.

However, Kato doesn't necessarily disclose the recessed portion including a groove portion at a bottom portion of the recessed portion and said groove portion being narrower than an upper portion of the recessed portion (claims 5 & 16).

Ide teaches a water cutoff structure (Figs 1-7) of a covered wire capable of securing a sealing condition and providing an excellent melting operation efficiency (Col 2, lines 43-46). Specifically, with respect to claims 5 & 16, Ide teaches that the recessed portion (43) includes a groove portion (inside of groove portion is curved to fit projection) having a narrower width than the recessed portion (43) formed at the bottom portion of the recessed portion (43, Fig 5).

With respect to claims 5 & 16, it would have been obvious to one having ordinary skill in the art of water cutoff structures, at the time the invention was made to modify

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the recessed portion of Kato to comprise a groove portion (inside of groove portion is curved to fit projection) having a narrower width than the recessed portion (43) formed at the bottom portion of the recessed portion as taught by Ide because Ide teaches that such a configuration provides a covered wire capable of securing a sealing condition and providing an excellent melting operation efficiency (Col 2, lines 43-46).

Allowable Subject Matter

8. Claims 8-11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: This invention deals with a water cutoff structure comprising a projected rib extended in a direction intersecting with the longitudinal direction of the covered wire and provided at a face of the partition wall in contact with the covered wire and a projection is formed on the matching surface on another side of the recess, wherein the matching surface abuts to a mating surface of the second member (claim 8). The above stated claim limitations, in combination with base claim limitations, is not taught or suggested by the prior art of record. Claims 9-11 depended from claim 8 and therefore would also be allowable if claim 8 is rewritten in independent form.

Response to Arguments

10. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. This action is non-final.

Communication

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William H. Mayo III
Primary Examiner
Art Unit 2831